

In the Claims:

1. (previously presented) An integrated circuit chip mounted on a leadframe, comprising:

a chip having first and second major opposing surfaces and a circuit having active components and having a protective overcoat over the first surface;

a network of substantially coplanar power distribution lines laterally disposed on the first surface of said chip over said overcoat, located directly over active components of said circuit; said lines conductively connected to selected active components below said lines in a direction normal to said first surface through vias in said overcoat, said lines also connected by conductors to segments of said leadframe, and

an electrically conductive member directly connecting said power distribution lines to connection regions external of said chip.

2. (currently amended) A semiconductor device having an additional conductor network on the chip surface, wherein the power distribution of the integrated circuit is combined with the power distribution of the leadframe, comprising:

a semiconductor chip having first and second opposing major ~~surfaces~~ surfaces;

an integrated circuit fabricated on said first chip surface, said circuit having active components, contact pads, at least one metal layer, and being protected by a mechanically strong, electrically insulating overcoat having a plurality of metal-filled vias to contact said at least one metal layer;

electrically conductive substantially coplanar, laterally disposed films deposited on said overcoat and patterned into a network of lines substantially vertically over said active components, said films in contact with said vias and having at least one stress-absorbing film and an outermost film being non-corrodible and metallurgically attachable;

said network patterned to distribute power current and ground potential;

a leadframe having a chip mount pad, a first plurality of segments providing electrical signals, and a second plurality of segments providing electrical power and ground;

said second chip surface attached to said chip mount pad;

electrical conductors connecting said contact pads with said first plurality of segments; and

electrical conductors connecting said network lines with said second plurality of segments.

3. (previously presented) The device according to Claim 2 wherein said chip is selected from a group consisting of silicon, silicon germanium, gallium arsenide, and any other semiconductor material customarily used in electrical device fabrication.

4. (canceled)

5. (previously presented) The device according to Claim 2 wherein said integrated circuit comprises multi-layer metallization, at least one of said layers made of pure or alloyed copper, aluminum, nickel, or refractory metals.

6. (previously presented) The device according to Claim 2 wherein said overcoat comprises materials selected from a group consisting of silicon nitride, silicon oxynitride, silicon carbon alloys, polyimide, and sandwiched films thereof..

7. (previously presented) The device according to Claim 2 wherein said leadframe comprises a sheet-like material selected from a group consisting of copper, copper alloy, aluminum, iron-nickel alloy, or invar.

8 –9 (canceled).

10. (currently amended) The device according to Claim 2 wherein leadframe segments are ~~be~~ shaped as leads solderable to outside parts.

11. (previously presented) The device according to Claim 2 further comprising solder balls attached to said electrical conductors connecting said network lines with said second plurality of segments.

12. (previously presented) The device according to Claim 2 further comprising a wire bond to said electrical conductors connecting said network lines with said second plurality of segments.

13. (previously presented) The device according to Claim 2 wherein said electrically conductive films comprise at least one stress-absorbing metal layer selected from a group consisting of copper, nickel, aluminum, tungsten, titanium molybdenum, chromium, and alloys thereof.

14. (previously presented) The device according to Claim 2 wherein said outermost metal layer is selected from a group consisting of pure or alloyed gold, palladium, silver, platinum, and aluminum.

15. (previously presented) The device according to Claim 2 wherein said conductors are bonding wires.

16. (previously presented) The device according to Claim 15 wherein said bonding wire is selected from a group consisting of pure of alloyed gold, copper, and aluminum.

17. (canceled)

18. (previously presented) The device according to Claim 2 wherein said network of lines is electrically further connected to selected segments suitable for outside electrical contact.

19. (previously presented) The device according to Claim 2 wherein said network of lines, together with said metal-filled vias, provides the power distribution function between said active circuit components.

20-23 (canceled)